



Background

- The Infectious Diseases Society of America (IDSA) guidelines for asymptomatic bacteriuria (ASB) recommend routine screening and treatment only in patients with UTI symptoms, pregnant women and patients undergoing urological procedures associated with mucosal trauma¹.
- Despite the availability of specific guidelines, ASB is one of the most common reasons for unnecessary antibiotic prescriptions in acute care settings.
- Asymptomatic bacteriuria is not associated with poor long-term outcomes including renal failure, genitourinary cancer, or increased mortality².
- Because there has been no demonstrated clinical benefit and the risks of adverse events and antimicrobial resistance are high, the majority of patients should not be screened or treated for asymptomatic bacteriuria.

Objective

- Evaluate current screening and treatment rates of asymptomatic bacteriuria at SRHC

Methods

- A retrospective data collection was conducted to identify patients with a positive urine culture from July 1, 2019 to September 30, 2019.

Inclusion Criteria:

- 18 years of age or older
- Positive urine culture (>100,000 colony forming units per milliliter)
- Admitted to SRHC

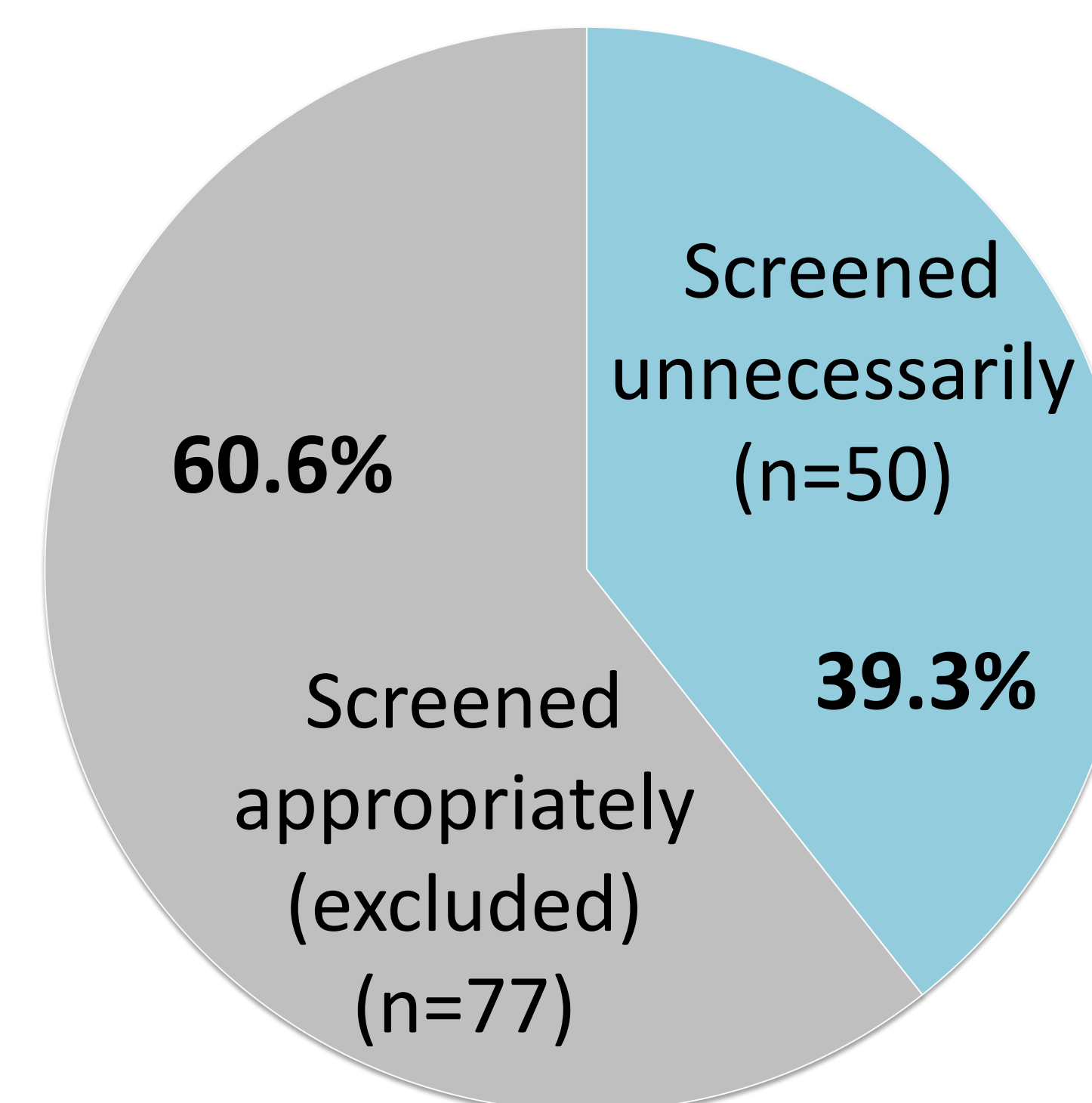
Exclusion Criteria:

- Less than 18 years of age
- Pregnant
- Urinary tract infection symptoms
- Severely Immunocompromised (ANC<100)
- Undergoing urologic surgery where mucosal bleeding is anticipated
- Receiving antibiotic treatment for a concurrent infection or suspected infection
- Admitted to hospital on antibiotics for UTI treatment

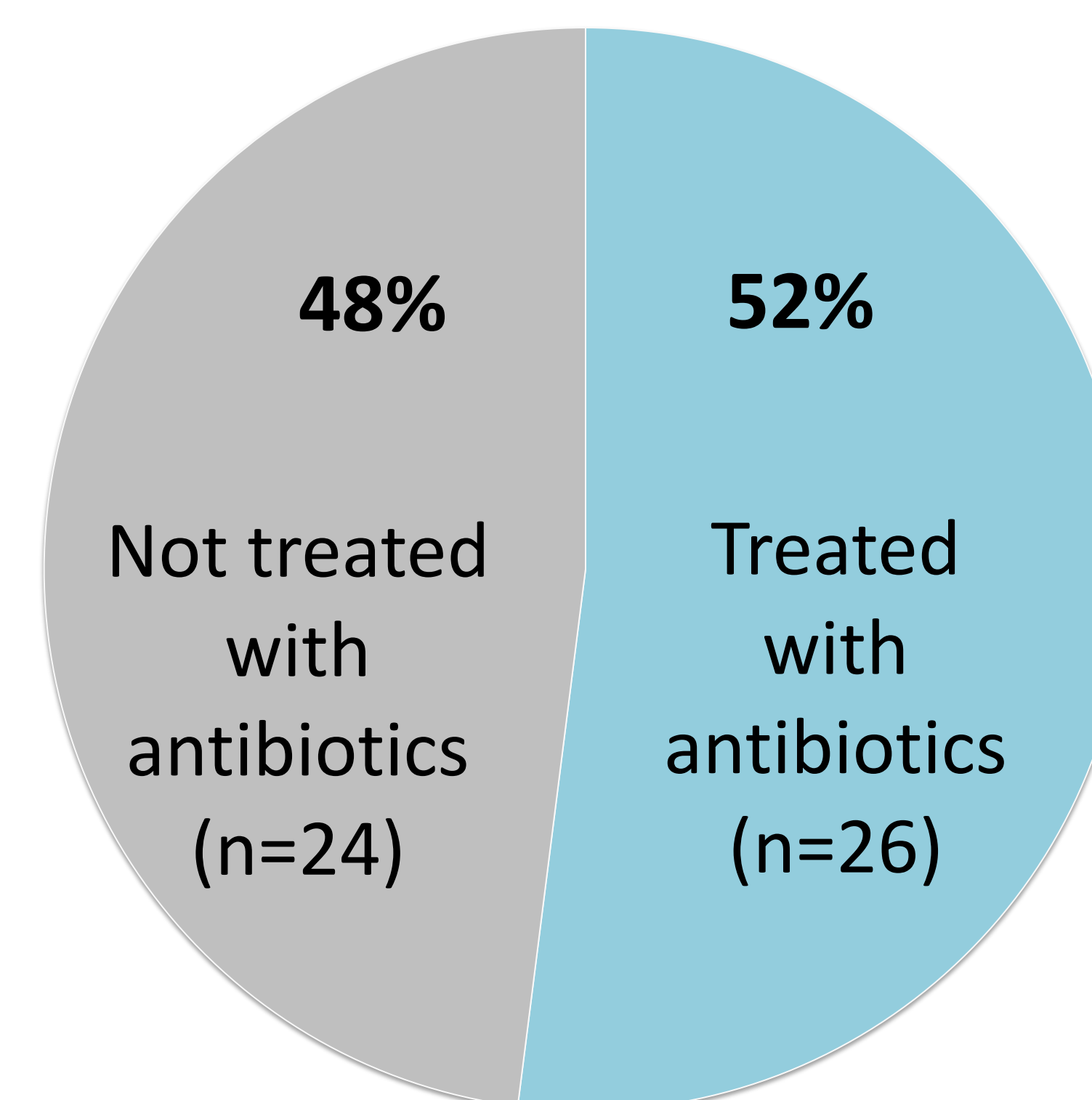
Results

Patient Demographics		
Patients	Male	9 (18%)
	Female	41 (82%)
Age (years)	Mean	66.5
	Median	71

ASB Screening Rates (n=127)



Treatment Rates of Patients Screened Unnecessarily (n=50)



Conclusions

- Patients with asymptomatic bacteriuria were treated with antibiotics more than half the time (52%).
- Patients were most commonly excluded due to antibiotic treatment for a concurrent infection (n=37). These patients may have also been screened and treated inappropriately; however, it is difficult to distinguish antibiotic indications in these patients through manual chart review.
- This evaluation did not capture patients who were treated without collecting a urine culture or those who were treated but had a negative urine culture; therefore, screening and treatment rates may be underestimated.

Development of an electronic health record intervention to help increase guideline familiarity and curtail inappropriate antibiotic use will be proposed and implemented. The impact of this intervention on asymptomatic bacteriuria screening and treatment rates will be evaluated in a future study.

Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation:

Brittanie S. Kling: nothing to disclose
Steven Blanner: nothing to disclose

References

1. Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases*. 2019; 68(10):e83-e110.
2. Colgan R, Nicolle LE, McGlone A, Hooton TM. Asymptomatic bacteriuria in adults. *Am Fam Physician*. 2006; 74(6).